

RECEIVED
CENTRAL FAX CENTER

AUG 13 2007

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application, please amend the claims as follows:

Listing of Claims:

1. (Currently Amended) A mixture for screening radiation, An inorganic radiation protection mixture comprising:
 - a) at least 26 wt.% of gadolinium, said gadolinium being in elemental form, as a compound, and/or as an alloy, wherein if the gadolinium is in the form of a compound, then said compound is gadolinium(III) oxide (Gd_2O_3);~~as the element and/or from compounds and/or from alloys,~~
 - b) at least 10 wt.% of one or more elements ~~and/or alloys and/or compounds of these elements~~ chosen, independently of each other, from the group consisting of barium, indium, tin, molybdenum, niobium, tantalum, zirconium and tungsten, wherein the one or more elements are in elemental form, as a compound, and/or as an alloy and wherein the concentration of tungsten, if tungsten is present, is at least 10 wt.% with respect to the total amount of the mixture.
2. (Currently Amended) The mixture according to Claim 1, further comprising:
~~component c)~~ 0 to 64 wt.% of one or more further elements and/or alloys and/or compounds of these elements chosen, independently of each other, from the group consisting of bismuth, lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium, terbium, dysprosium, holmium, erbium, thulium, ytterbium and lutetium, wherein the one or more further elements are in elemental form, as a compound, and/or as an alloy.
3. (Currently Amended) The mixture according to Claim 1, wherein a maximum of 50 wt.% of tin, with respect to the total amount of the mixture[[,]] is present.

4. (Currently Amended) The mixture according to Claim 1, wherein the one or more ~~elements and/or alloys and/or compounds in of~~ component b) have a complementary radiation attenuating characteristic in the range 10 to 600 keV.
5. (Original) The mixture according to Claim 1 comprising at least 35 wt.% of gadolinium and at least 20 wt.% of tungsten.
6. (Currently Amended) The mixture according to Claim 1 having a, ~~wherein the specific density of the inorganic radiation protection mixture is in the range of~~ 4.0 to 13.0 g/cm³.
7. (Currently Amended) The mixture according to Claim 1, wherein the ~~inorganic radiation protection mixture has comprises~~ particles with having an average particle diameter in the range 0.1 to 200 µm.
8. (Currently Amended) The mixture according to Claim 2, wherein the one or more elements of components b) and c) are used in the form of alloys and/or compounds chosen, independently of each other, from the group consisting of oxides, carbonates, sulfates, halides, hydroxide, tungstates, carbides and sulfides.
9. (Withdrawn – Currently Amended) A P~~process~~ for preparing the mixture according ~~Claim-Claim~~ 1, comprising the steps of: drying components a), b) and c) in a temperature range of -20 to 500°C; and [(,)] screening and mixing components a), b) and c) for 5 minutes to 24 hours.
10. (Cancelled)
11. (Currently Amended) A substance for screening radiation comprising:
a) the Polymeric radiation protection substances comprising mixture[(s)]
according to Claim 1; and

b) at least one polymer.

12. (Currently Amended) ~~The Polymeric radiation protection substance according to Claim 11, wherein the polymeric radiation substance further comprises~~
comprising one or more additive[s].
13. (Currently Amended) ~~The substance Polymeric radiation protection according to Claim 11, wherein the polymer in the polymeric radiation protection is chosen from the group consisting of rubbers, thermoplastic materials, and polyurethanes, and mixtures thereof.~~
14. (Currently Amended) ~~The substance Polymeric radiation protection according to Claim 11, wherein the degree of filling is less than 80 wt.%.~~
15. (Currently Amended) A substance for screening radiation ~~Polymeric radiation protection substance comprising:~~
- ea) 5 to 85 wt.% of rubber, thermoplastic material or polyurethane, ~~and~~
 - eb) 10 to 80 wt.% of the mixture according to Claim 1, ~~and~~
 - ec) 5 to 20 wt.% of other additives.
16. (Withdrawn - Currently Amended) ~~A P~~rocess for preparing a polymeric radiation protection ~~the substance according to Claim 11, comprising reacting a~~
polymer with the mixture according to Claim 1.
17. (Withdrawn - Currently Amended) ~~The P~~rocess for preparing a polymeric radiation protection substance according to Claim 16, wherein the polymer is a rubber and wherein the reacting step comprises rubber is compounded the
rubber ~~with the mixture.~~

18. (Withdrawn - Currently Amended) ~~The P~~rocess for preparing a polymeric radiation protection substance according to Claim 16, wherein the polymer is a thermoplastic material and wherein the polymer is mixed with the mixture.
19. (Withdrawn - Currently Amended) ~~The P~~rocess for preparing a polymeric radiation protection substance according to Claim 16, wherein the polymer is polyurethane and the starting materials for the polyurethane are mixed directly with the mixture and then polymerized.
20. (Currently Amended) A product comprising the polymeric radiation protection substance according to Claim 11.